# THE MINERAL INDUSTRY OF ICELAND

## By Chin S. Kuo

Iceland's economy centered around the fishing industry and fish processing. Other important industries were aluminum smelting, ferrosilicon production, and hydroelectric and geothermal power generation. In 2004, the gross domestic product (GDP) grew by 5.7% with a GDP based on purchasing power parity of \$9.8 billion. Inflation remained at 3.1%. Exports accounted for about one-fourth of the GDP. Abundant hydroelectric and geothermal power enabled Iceland to expand its power-intensive industries. The country has limited mineral resources and was noted for its mining of diatomite deposits (International Monetary Fund, 2005§¹).

Alcoa Inc. of the United States planned to build a new 322,000-metric-ton-per-year (t/yr) primary aluminum smelter at Fjardaal in eastern Iceland. Construction was scheduled to begin in 2005, and production was expected to start in 2007. The facilities would be the most environmentally friendly and the most efficient in the world. Anodes would come from a new anode plant that Alcoa planned to build in Mosjoen, Norway (Metal-Pages, 2004§).

Century Aluminum Co. of the United States raised its stake to 100% in Nordic Aluminum Co. (Nordural) by investing \$150 million in May after acquiring a 49.9% share in the Icelandic producer in March. Nordural owned a 90,000-t/yr primary aluminum smelter at Grundartangi near Reykjavik. A planned expansion would double the smelter's capacity to 180,000 t/yr by 2006 (Platts, 2004a§).

Nordural decided to add another 32,000 t/yr of capacity to its expansion project, thus raising the smelter's total capacity to 212,000 t/yr. The added capacity was estimated to cost \$106 million, which would bring the total expansion cost to \$454 million. The long-term supply of electric power would come from Hitaveita Suournesja hf (Suournes Regional Heating) and Orkuveita Reykjavikur (Reykjavik Energy) from geothermal sources. The energy agreement included power for an additional 8,000 t/yr of capacity. This would bring total capacity of the smelter to 220,000 t/yr by late 2006. After the expansion was complete Nordural would have the infrastructure and support to allow a final expansion to 260,000 t/yr (Platts, 2004b§).

#### **Internet References Cited**

International Monetary Fund, 2005 (April), Iceland, World Economic Outlook Database, accessed June 2, 2005, via URL <a href="http://www.imf.org/external/pubs/ft/weo/2005/01/data/dbcoutm.cfm">http://www.imf.org/external/pubs/ft/weo/2005/01/data/dbcoutm.cfm</a>.

Metal-Pages, 2004 (February 3), Alcoa appoints Sigurdsson md of Icelandic smelter, accessed February 6, 2004, via URL http://www.metal-pages.com.

Platts, 2004a (March 29), Century Aluminum takes 100% stake in Iceland's Nordural, accessed March 30, 2004, at URL http://www.platts.com/metals/news/century.

Platts, 2004b (November 3), Iceland's Nordural to add further 32,000 mt to aluminum expansion, accessed November 9, 2004, at URL http://www.platts.com/metals/news/1834870.xml?s=n.

#### **Major Source of Information**

Ministry of Industry and Trade Arnarhvoli Reykjavik, Iceland 2000

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<sup>&</sup>lt;sup>1</sup>References that include a section mark (§) are found in the Internet References Cited section.

### TABLE 1 ICELAND: PRODUCTION OF MINERAL COMMODITIES1

(Metric tons unless otherwise specified)

Commodity		2000	2001	2002	2003	2004 <sup>e</sup>
Aluminum metal, primary <sup>2</sup>		224,439	245,135	285,394 <sup>r</sup>	286,022 <sup>r</sup>	270,600 <sup>3</sup>
Cement, hydraulic <sup>4</sup>		143,734	125,169	82,636 <sup>r</sup>	89,798 <sup>r</sup>	90,000
Diatomite		27,614	30,434	26,494 <sup>r</sup>	27,513 <sup>r</sup>	28,000
Ferrosilicon		70,000 e	111,948	120,624	117,171 <sup>r</sup>	118,000
Nitrogen, N content of ammonia		6,500 e	3,300			3
Pumice and related v	olcanic material: <sup>e</sup>					
Pumice		25,000	70,751 r, 3	56,478 r, 3	50,193 r,3	50,000
Scoria		500	1,000 r	1,000 r	1,000 r	1,000
Salte		4,000	4,500	4,500	4,500	4,600
Sand:e						
Basaltic	cubic meters	1,000	1,100	1,200	1,200	1,300
Calcareous, shell	do.	80,000	80,000	80,000	80,000	80,000
Sand and gravel	thousand cubic meters	4,000	4,000	4,200	4,200	4,200
Silica dust <sup>5</sup>		12,000	20,192 3	22,579 r, 3	23,830 r, 3	24,000
Stone, crushed: <sup>e</sup>						
Basaltic		95,000	95,000	95,000	96,000	96,000
Rhyolite	cubic meters	17,000	17,000	18,000	18,000	19,000

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>r</sup>Revised. -- Zero.

Table includes data available through June 21, 2005.

Ingot and rolling billet production.

Reported figure.

<sup>&</sup>lt;sup>4</sup>Sales. <sup>5</sup>Byproduct of ferrosilicon.